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PATENT

IN THE UNITED STATES PATENT OFFICE

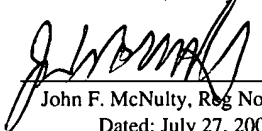
Serial No.: 10/581,353
Filed: May 31, 2006
For: **TREATMENT UNIT FOR
THE WET-CHEMICAL
ELECTROLYTIC TREATMENT
OF FLAT WORKPIECES**

Inventors: Uwe Hauf, Henry Kunze, and Ferdinand Wiener

Atty Doc. No.: 084-06

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service First Class mail postage prepaid in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450, on July 27, 2006


John F. McNulty, Reg No. 23,028
Dated: July 27, 2006

COVER LETTER WITH CERTIFICATE OF MAILING

*Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450*


Sir:

Enclosed herewith please find the following:

- (1) Cover Letter with Certificate of Mailing;
- (2) International Preliminary Examination Report on Patentability (7 pages); and
- (3) Paul & Paul Postcard to be returned by the PTO.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES ASSOCIATED WITH THIS COMMUNICATION, OR CREDIT ANY OVERPAYMENT, TO PAUL & PAUL DEPOSIT ACCOUNT NO. 16-0750, ORDER NO. 4133.

Respectfully submitted,


John F. McNulty
Reg. No. 23,028
Paul & Paul
2900 Two Thousand Market St.
Philadelphia, PA 19103
(215) 568-4900


PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P60204PCT		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/EP2004/014008		International filing date (<i>day/month/year</i>) 07.12.2004		Priority date (<i>day/month/year</i>) 19.12.2003
International Patent Classification (IPC) or national classification and IPC INV. C25D17/28				
Applicant ATOTECH DEUTSCHLAND GMBH				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i> a total of 2 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 12.01.2006		Date of completion of this report 08.06.2006		
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized officer Desbois, V Telephone No. +31 70 340-8952		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/014008

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-19 as originally filed

Claims, Numbers

2-21 as originally filed

1, 22-24 received on 12.01.2006 with letter of 12.01.2006

Drawings, Sheets

1/5-5/5 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/014008

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-24
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-24
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V.

Reference is made to the following documents:

D1 : EP 0 959 153 A (PROCESS AUTOMATION INTERNATIONAL LIMITED;
SHIPLEY COMPANY LLC) 24 November 1999

D3 : DE 40 35 932 A1 (HOELLMUELLER, HANS, 7033 HERRENBERG, DE; HANS
HOELLMUELLER MASCHINENBA) 14 May 1992 (1992-05-14)

1. Major clarity remark

Claim 1 lacks of clarity (Art. 6 PCT) since the word "group" in the expression "a group of conveying members" is vague. Thus, it makes it difficult to clearly differentiate the subject-matter of claim 1 from the available prior art.

Moreover, it does not appear clearly that one particular recess can be used for different insertion elements (Art. 6 PCT). Therefore claim 1 has been understood in the broader meaning for the assessment of novelty and inventive step (the broader meaning being : insertion elements have different shapes/dimensions, and the recesses have different shapes/dimensions accordingly). This interpretation seems to be logical, since claim 23 precises that the recesses have the same dimensions and shapes, which means that this feature is not included in the scope of claim 1.

2. Independent claim

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claim 1** does not involve an inventive step in the sense of Article 33(3) PCT.

The document D3 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

A treatment unit for the wet-chemical or electrolytic treatment of flat workpieces (col. 1, l. 3-10),

comprising conveying members for transporting the workpieces in the unit on a conveying path (fig. 1), characterized in that the treatment unit further comprises

- a) carrier elements with recesses (fig. 2, feature 15), said carrier elements being oriented to be parallel to the conveying path and
- b) groups of conveying members (shafts 4 and 5, or 22 and 23) fitted into the recesses

The subject-matter of claim 1 differs from this known treatment unit in that the conveying members of the group are carried via insertion members, which are fitted into the recesses.

The use of insertion members, such as described in claim 1, does not seem to have a particular effect, since a group of conveying members can be fitted directly in the recesses, without the need of insertion elements. Since no effect can be identified, no problem to be solved can be established.

Therefore claim 1 does not seem to involve an inventive step (Art. 33(3) PCT).

3. Dependent claims

Dependent claims 2-24 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step (Article 33(2) and (3) PCT), see **D1, D2, D3**, passages cited in the search report.

PCT/EP2004/014008
Atotech Deutschland GmbH
January 12, 2006

EPO - DG 1
12 01 2006
(44)

Patent Claims

1. A treatment unit for the wet-chemical or electrolytic treatment of flat workpieces, comprising conveying members for transporting the workpieces in the unit on a conveying path, characterized in that the treatment unit further comprises

a) carrier elements (4, 5) with recesses (21), said carrier elements being oriented to be parallel to the conveying path and

b) at least one module system for carrying or securing the conveying members (6, 6', 6'', 7), said module system comprising insertion elements (13, 14, 26), said insertion elements (13, 14, 26) being configured such that they are fitted into the recesses (21) of the carrier elements (13, 14, 26),

characterized in that the insertion elements (13, 14, 26) are designed such that they are able to carry or secure at least one item selected from the group comprising a group of conveying members located on one side of the conveying path, a treatment device and a group of treatment devices.

22. The treatment unit according to any one of the preceding claims, characterized in that the recesses (21) are arranged in the carrier elements (4, 5) according to a uniform pattern.

23. The treatment unit according to any one of the preceding claims, characterized in that all the recesses (21) comprise the same dimensions and shapes, or a few groups of differently configured recesses are provided in the carrier elements (4, 5).

24. Use of the treatment unit according to any one of claims 1 – 23 for treating flat workpieces in a horizontal conveyORIZED line.